

POJER, J.; POLSTER, M.; ROHAN, P.; UHER, V.

Considerations on biochemistry of Mycobacterium tuberculosis. Lek.
listy, Brno 6 no.24:745-749 15 Dec 51. (CIML 21:5)

1. Of the Institute of General and Experimental Pathology (Head—
Prof. V. Uher, M.D.) of Masaryk University, Brno.

POLSTER, M.; HORACEK, J.

Relation of the structure of 2-chloro-4-nitrophenol to the fungicidity
of pathogenic moulds. Cesk. derm. 26 no.9:371-379 Nov 51. (CIML 21:5)

1. Of the Institute of General and Experimental Pathology and of the
Dermatological and Venereological Clinic of Masaryk University, Brno.

PÖLSTER, M.

Infection of water by solid compounds of hydrogen peroxide. M. Polster and Z. Bodnářk (Masaryk Univ., Brno, Czechoslovakia). *hyg., epidemiol., mikrobiol., imunol.*, 3, 201-5(1954).—Owing to difficulties met when using H_2O_2 , addn. salts (I) of H_2O_2 with Na carbonate were tested. They caused min. denaturation of water, were easy to apply, and were not poisonous. However to achieve a perfect effect a comparatively large quantity of I and a long period of contact are necessary; the salts have limited stability. The efficiency of I is enhanced by Ag salts and its stability by silica gel. L. J. Urbánek

POLSTER, MIROSLAV

POLSTER, Miroslav, BMDr; BOCHORAK, Zdenek, PhMr

Sagen; a new disinfectant for minor water supply sources. Cesk.
hyg. epidem. mikrob. 2 no.2:157-163 Apr '53.

1. Z hygienickeho ustavu lekarske fakulty v Brne.
(WATER SUPPLY,
disinfection with sagen)
(ANTISEPTICS,
sagen in water disinfection)

POLSTER, M.

POLSTER, M.; ROHAN, P.; SIMIKOVA, V.

Effect of iron on growth of Mycobacterium. Česk. hyg. epidem.
mikrob. 2 no.6:424-431 Dec. '53.

1. Z ustanovky pro experimentální patologii lekarské fakulty MU v
Brně. Prednosta: prof. MUDr et RNDr V. Uher.

(MYCOBACTERIUM TUBERCULOSIS, effect of drugs on,
iron on growth)

(MYCOBACTERIUM
phlei, eff. of iron on growth)
(IRON, effects,
on Mycobact. phlei & tuberc.)

POLSTER, M.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Biological Chemistry

(2)
Catalase in tubercle bacilli. M. Polster, Masaryk Univ., Brno). *Lékařské Listy* 8, 556-7 (1953). — p-Aminosalicylic acid (PAS) and isonicotinic acid hydrazide (INH) form stable and insol. complexes with Fe and Cu. The tuberculostatic action of PAS and INH might be exercised through the complex formation between these compds. and Fe component of catalase, thus rendering the enzyme inactive. However, neither PAS, INH, salicylic acid, hydroxylamine-HCl nor hydrazine hydrate, which were tested simultaneously, had any substantial effect on catalase activity in *Mycobacterium tuberculosis*. Oldřich Šebek

POLSTER, Miroslav, RNDr

~~Mechanism of action of fungicide p-nitrophenol derivative.~~
Cesk.derm. 29 no.3:184-186 Je '54.

1. Z mikrobiologickeho ustavu (prof. Dr V. Tomasek) a kozni
kliniky (prof. Dr A.Tryb) lekarske fakulty v Brne.
(NITROPHENOLS, effects,
*p-nitrophenol deriv., fungicide)
(FUNGICIDES,
*p-nitrophenol deriv.)

POLSTER, MIROSLAV

Metabolism of *p*-aminosalicylic acid. Pavel Rohan and
Miroslav Polster (Masaryk Univ., Brno, Czech.). Biol.
Lett. 37, 69 (1961).—Urine of tuberculous patients treated
with *p*-aminosalicylic acid (PAS), contained increased amounts
of glucuronic acid and an oxidation product of either free
PAS or its derivative, which was of nonquinoid character.
Oklrich Sebek

POLSTER, M.

Chemotactic lipide substances of tubercle bacilli. Miroslav Polster (Masaryk Univ., Brno, Czech.). *Lokalna leceni* 9 (1952).—Review on histopathol. properties of different fractions from tubercle bacilli and evaluation of the action of phthioic acid derivs. 25 references.
L. J. Urbánek

Polster, M.

POLSTER, M.
Surname, Given Name

Country: Czechoslovakia

Academic Degrees:

Affiliation: Microbiological Institute of the Medical Faculty,
Brno.

Source: Ceskoslovenska Hygiena (Journal of Hygiene), Vol V,
No 9, Prague, Nov 1960, Page 556.

Date:

Author of "Bacteriological Diagnosis of Leptospirose
Mesenterides in Lemnoides," Source, Page 556.

Page 1 of 1

(2)

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POLSTER, M.

Influence of iron on growth of mycobacteria. M.
Polster, P. Rohan, and V. Simkova (Masaryk Univ.,
Brno, Czech.). Českoslov. hyg. epidemiol. mikrobiol.
imunol. 2, 424-31 (1953).—The known stimulating growth
effect of Fe on *Mycobacterium tuberculosis* was confirmed
and moreover the significant growth effect of complexly
bound Fe, both bivalent and trivalent, was proved. No
such effect could be shown in *Mycobacterium phlei*. Phos-
phate exts. from both kinds of mycobacteria were unable to
free Fe from the complex, ferro- and ferricyanide. The
relationship of the complex binding of Fe to the action mech-
anism of some of the antituberculous substances is discussed.
J. Urbánek

POLSTER, M.

Tuberculostatic effect of complex-forming compounds.
M. Polster (Masaryk Univ., Brno, Czech.). *Lékařské
listy*, 1953, 48, 1-3 (1953).—The antibiotic activities of *o*-
phenanthroline (I), 8-hydroxyquinoline, 4-aminosalicylic
acid, phthalylhydroxamic acid, and phthalylhydroxylamine
were tested in media with and without Fe. The greatest
effect was observed with I. Its activity increased many
times against tubercle bacteria in a medium contg. Fe in
citrate form. The probable mechanism of action is illus-
trated.
L. J. Urbánek.

CZECHOSLOVAKIA / Pharmacology, Toxicology. Antiseptics.

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 27899

Author : Polster, Miroslav

Inst : Not given

Title : Mechanism of Antifungicidal Action of n-Nitrophenole Derivatives. II

Orig Pub : Ceskosl. dermatol., 1957, 32, No 3, 134-136

Abstract : No abstract given

Card 1/1

POLSTYANAYA, A.V.

Influence of a transfusion of protein hydrolysate on liver
function in surgical patients. Probl.gemat.i perel.krovi no.9:
45-51 '61. (MIRA 14:9)

1. Iz khirurgicheskoy kliniki (zav. - prof.D.M. Grozdov) TSen-
tral'nogo ordena Lenina instituta hematologii i perelivaniya
krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagadasarov)
Ministerstva zdorovookhraneniya SSSR.
(BLOOD PLASMA SUBSTITUTES) (LIVER)

POLSTYANKO, L. L.

✓ Study of the structure of chelates by their infrared and ultraviolet spectra. - V. V. Polstyanko, L. A. Karatygina, and V. P. Terent'ev (M. V. Lomonosov State Univ., Moscow), Khim. Nauki i Prom. 2, 767-8 (1957). Chelates were prepd. by Pfeifer's method (C.A. 34, 87) from Schiff bases and salts of Cu, Ni, Pd, Be, Zn, and Cd or from a metal, salicylaldehyde and the corresponding amines. Two types of spectra were obtained. The Ni and Cu salicylaldehyde amine (I) and the ethylenediamine analog (II) exhibited 2 peaks at 276 and 355 m μ . Available data on x-ray patterns (Cox, et al., C.A. 30, 25147) and magnetic susceptibility (Calvin, et al., C.A. 41, 8582) indicate that II has a cis structure. Ni and Cu salicylaldehyde methyl- and butylamines and hexamethylenediamine exhibited an addnl. peak at 300 m μ . These are trans compds. The infrared spectra of I passed through 1 peak at 3300 cm. $^{-1}$ confirming the trans structure. X-ray studies of the Ni chelate indicate a trans structure. The spectra of Be, Zn, and Cd chelates were similar to each other and are probably tetrahedral complexes.

Distrs: 4E43/4E3d

J. Bencowitz

5 (3,4)

AUTHORS: Kazitsyna, L. A., Lokshin, B. V., Sov/55-58-6-26/31
Polstyanko, L. L., Terent'yev, A. P.

TITLE: Infrared Spectra of Several Inner-complex Compounds in the Field of the Valency Oscillations of N-H (Infrakrasnyye spektry nekotorykh vnutrikompleksnykh soyedineniy v oblasti valentnykh kolebanii N-H)

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki, mehaniki, astronomii, fiziki, khimii, 1958, Nr 6, pp 207 - 213 (USSR)

ABSTRACT: The object of this article is the investigation of the structure of the inner-complex compounds of the quadri-coordinated metals (Cu, Ni, Pd, Be, Zn, Cd) in which a successive modification of the electronic shell takes place. These metals are capable of forming tetrahedral or even (in this case cis- and transisomers) complexes. The examination was carried out by means of infrared-absorption spectra. These spectra permit a determination concerning the existence of the transisomers, as with the latter the symmetrical oscillations are not active in the infrared spectrum owing to the absence of a change of the bipolar moment. In order to draw conclusions as to the even cis-shape or the tetrahedral shape, further tests are re-

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Infrared Spectra of Several Inner-complex Compounds SOV/55-58-6-26/31
in the Field of the Valency Oscillations of N-H

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quired. In the present paper the authors restricted their investigations to the possibility of determining the even trans-configuration. Infrared spectra were taken of a number of compounds containing the atomic group of HN-Me-NH. The authors tried to find out the configuration, taking into account the absorption bands in the field of the valency oscillations of the N-H bond. The following compounds were investigated: Cu, Ni, Pd, Cd, Be, iminates of salicyl aldehyde, the acetyl-acetone iminates of Cu, Ni, Pd, the α -oxyacetophenone iminates of Cu and Ni, the β -oxynaphthaldehyde-iminates of Cu and Ni and the copper salts of the ethylene-bis- α -iminopropione- and of the α -phenyl acetic acid. The experimental part contains a short description of the syntheses of the various complex compounds; the outward form and the contents of nitrogen and copper are shown in table 1. In figure 1 the spectra of those compounds are shown whose X-ray structural analysis and magnetic measurements seemed to point to a trans-structure. Figure 2 refers to the spectra of the Cd and Be salicylal iminates which are of tetraedric structure, and to the spectra of the last-mentioned compounds, which - owing to the presence of an

Infrared Spectra of Several Inner-complex Compounds SOV/55-58-6-26/31
in the Field of the Valency Oscillations of N-H

ethylene-bridge - show an even cis-configuration. Table 2 is a compilation of all results, characterizing the absorption of the compounds investigated in the field of the N-H-binding valency oscillations. The data obtained permit the following conclusions to be drawn: the composite bands of the cis- and trans-configuration are generated under the influence of the crystal lattice. If in the field of the valency oscillations but one band becomes clearly visible, this is considered as a proof that there is an even trans-configuration. If in solutions this one band remains unchanged in spite of another scission, then the existence of this band is only a proof for an even trans-configuration, if the solvent does not exercise any influence on the interaction between the metal-atom and the donor atoms. There are 2 figures, 2 tables, and 8 references, 2 of which are Soviet.

ASSOCIATION: Kafedra organicheskoy khimii (Chair for Organic Chemistry)

SUBMITTED: July 25, 1958
Card 3/3

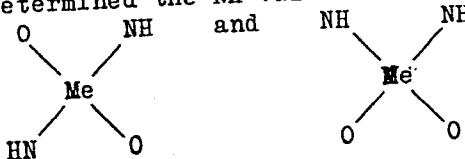
SOV/48-23-10-10/39

24(7)-7(3) AUTHORS: Kazitsyna, L. A., Lokshin, B. V., Polstyanko, L. L., Terent'yev, A.P.

TITLE: The Infrared Spectra of Some Innercomplex Compounds Within the Range of NH-Valence Oscillations

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 10, pp 1196-1198 (USSR)

ABSTRACT: The authors investigated a number of innercomplex metal compounds (coordinate number 4) by means of infrared spectra within the range 3000 - 3500 cm^{-1} and determined the NH-valence oscillation frequency in the formations



The formulas for the structure of the investigated compounds are given (Me denotes the metal). The substance to be investigated was prepared as vaseline paste; measurements were carried out by using a spectrophotometer of the type IKS-11. The results are shown by a table. Figures 1 - 3 show the characteristic shape of the spectra of three compounds. The data given by the table are

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The Infrared Spectra of Some Innercomplex Compounds
Within the Range of NH-Valence Oscillations

SOV/48-23-10-10/39

then discussed. One or several bands may occur in the spectrum. If one band occurs in the spectrum of an innercomplex compound containing an NH-group in connection with NH-valence oscillations, this may be considered to prove the existence of a plane trans-structure of the complex. The non-existence of a splitting-up in the spectra of solutions and the occurrence of only one band may be considered to prove the existence of a trans-structure only if the solvent exercises no essential influence upon the interaction between the metal and the donor atoms. There are 3 figures, 1 table, and 4 references, 1 of which is Soviet.

Card 2/2

5(3,4)
AUTHORS:

Kazitsyna, L. A., Polstyanko, L. L., SOV/20-125-4-32/74
Kupletskaya, N. B., Ignatovich, T. N., Terent'yev, A.P.,
Corresponding Member AS USSR

TITLE:

Investigation of the Absorption Spectra of the Alkylimines
of o-Oxycarbonyl Compounds (Issledovaniye spektrov
pogloshcheniya alkiliminov o-oksikarbonil'nykh soyedineniy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 4, pp 807-810
(USSR)

ABSTRACT:

For the purpose of determining the type of bond between metal
and the donor atoms in the inner-complex compounds the
comparison of the spectra of the initial addenda and the formed
inner-complex compounds is used. The maintenance of the spectral
character of the addendum in an inner-complex compound gives
evidence of a formation of an "ionic" bond: a decisive change
of the type of spectrum in the produced complex, however points
out to the formation of a covalent bond between metal and donor
atoms (Ref 1). In the former case it is possible to determine
the strength of the forming bond (Ref 2) by the degree of shift
of the bands of the inner-complex compound. The authors
investigated the spectra of inner-complex compounds of addenda

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Investigation of the Absorption Spectra of the Alkylimines of o-Oxycarbonyl Compounds

as acetyl acetone, salicylaldehyde, o-oxyacetophenone, β -oxynaphthaldehyde and their alkylimines (Ref 3). All mentioned compounds form hydrogen bonds of different type and strength. In order to determine the initially mentioned changes in the spectrum which are due to the formation of a hydrogen bond, the electron spectra were investigated in different solvents. It was found that in addenda containing only hydrogen as donor atoms the hydrogen bond does not cause a remarkable variation of the spectrum character: only some main bonds are shifted in the direction of the long waves. However, in addenda as alkylimines of salicylaldehyde and o-oxyacetophenone a new bond appears within the range of 25000 cm^{-1} . Its occurrence and intensity are determined by the used solvents. In inert solvents (isooctane, carbon tetrachloride) the spectra of alkylimines are similar to those of oxygen compounds not only with respect to their character but also with respect to the position of the absorption bonds. In this case the hydrogen bond appears also as a shift of the main bands by $1500-2000\text{ cm}^{-1}$ in the red direction (Table 1). There is a great difference

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Investigation of the Absorption Spectra of the
Alkylimines of o-Oxycarbonyl Compounds

SOV/20-125-4-32/74

between the spectra of the two last mentioned alkylimines in polar solvents and those in inert solvents, and thus there is also a considerable difference between them and the spectra of oxygen compounds. The above investigation shows that a direct comparison of the spectra of such addenda as alkylimines of salicylaldehyde and o-oxyacetophenone with the spectra of the inner-complex compounds produced from them is permissible if spectra in polar solvents are concerned. As the inner-complex compounds of these two substances are as a rule not soluble in inert solvents and as it is necessary to take their spectra in chloroform and alcohol for the purpose of determining the form of bond it is advisable to make use of the comparison between alkylimines and spectra in not polar substances. In the case of "ionic" compounds it is of advantage to determine in not polar solvents the relative strength as a function of the spectrum of the methyl ester of the addendum concerned, i. e. as a function of such a spectrum that is not changed under the action of inner- or intramolecular interactions. There are 3 figures, 2 tables, and 5 references, 1(2) of which are Soviet.

Card 3/4

KAZITSYNA, L.A.; KUPLETSKAYA, N.B.; POLSTYANKO, L.L.; KIKOT', B.S.;
KOLESNIK, Yu.A.; TERENT'YEV, A.P.

Ultraviolet absorption spectra of alkyl imines of acetylacetone and
 β -hydroxynaphthaldehyde. Zhur. ob. khim. 31 no.1:313-323 Ja '61.
(MIRA 14:1)

1. Moskovskiy gosudarstvennyy universitet.
(Naphthaldehyde) (Acetone)
(Imines—Spectra)

L 1125-66 ENT(m)/T

ACCESSION NR: AP5022938

UR/0062/65/000/008/1500/1502

541.183+546.284

AUTHOR: Dubinin, M. M.; Zhukovskaya, Ye. G.; Luk'yanovich, V. M.; Murdmaa, K. O.

Pol'syanov, Ye. F.; Senderov, E. E.

TITLE: Adsorption volumes of synthetic mordenites

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 8, 1965, 1500-1502

TOPIC TAGS: molecular sieve, synthetic zeolite, mordenite

ABSTRACT: Adsorption (pore) volumes of sodium and hydrogen forms of synthetic mordenite were determined in order to check them against the corresponding values calculated on the basis of X-ray analysis. For comparison, also H-Zeolon (product of Norton Company) was examined. The saturation volumes of Na and H synthetic mordenites were determined from water vapor isotherm at 20°C, nitrogen and argon isotherms taken at -196°C, and from sorption and desorption isotherms for benzene taken at 20°C and various pressures. For all mordenites an excellent agreement was found between the calculated pore volumes and the values obtained from water vapor, nitrogen, and argon adsorption measurements, while benzene adsorption gave values for the pore volumes that were too low. This was due to the fact that the small cavities in the

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L 1125-66

ACCESSION NR: AP5022938

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mordenite tube-like channels were inaccessible to benzene. It was concluded that only the channels with openings made of oxygen rings containing 12 atoms are accessible to benzene. Orig. art. has: 2 figures, 2 tables.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry, Academy of Sciences, SSSR); Institut geokhimii i analiticheskoy khimii im. V. I. Bernadskogo Akademii nauk SSSR (Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 17Dec64

44,55
ENCL: 00

SUB CODE: MT, GC

NO REF SOV: 004

OTHER: 003

Card 2/2 GP

DUBININ, M. M.; ZHUKOVSKAYA, Ye. G.; MURIMAA, K. O.; POLSTYANOV, Ye. F.

Adsorption properties and the secondary porous structure of adsorbents having molecular-sieve action. Report No. 7:
Volumes of the cavities of dehydrated crystals of synthetic zeolites of the types A and X filled up during absorption of the vapors of various substances. Izv. AN SSSR Otd. khim. nauk no.12:2113-2121 D '62. (MIRA 16:1)

1. Institut fizicheskoy khimii AN SSSR.

(Zeolites) (Adsorption)

S/062/62/000/012/001/007
B101/B186

AUTHORS: Dubinin, M. M., Zhukovskaya, Ye. G., Murdmaa, K. O., and Polstyanov, Ye. F.

TITLE: Study on adsorption properties and secondary pore structures of adsorbents with a molecular sieve effect. Communication VII. Volumes of the cavities of dehydrated crystals of synthetic A and X zeolites, which are filled by vapor adsorption of various substances

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 12, 1962, 2113-2121

TEXT: The isothermal lines of the sorption of water at 20°C, nitrogen at -195°C, and benzene at 20°C were plotted for NaA, CaA, NaX, and CaX zeolites to determine the characteristic adsorption values. The adsorption volumes were determined: (1) by calculation from the isothermal equation (Izv. AN SSSR, Otd. khim. n., 1958, 1165), developed on the basis of the potential theory of adsorption; (2) by determining graphically the characteristic equilibrium pressure h_0 for each vapor before capillary

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S/062/62/000/012/001/007

B101/B186

Study on adsorption properties and ...

condensation sets in. The values (v^0) obtained in two different ways were consistent (in cm^3/g): with H_2O at 20°C $0.269 - 0.272$ for NaA, $0.279 - 0.283$ for CaA, $0.323 - 0.338$ for NaX, $0.355 - 0.360$ for CaX; with H_2 at -195°C 0.287 for CaA, $0.336 - 0.340$ for NaX, $0.349 - 0.350$ for CaX, and with C_6H_6 at 20°C $0.293 - 0.297$ for NaX, and $0.300 - 0.301$ for CaX.

Calculation of the number n of unit cells with the composition $z[y\text{Na}_2\text{O} \cdot (1-y)\text{H}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot x\text{SiO}_2]$ and the molecular weight M per unit weight of the zeolite crystal gave: for NaA: $x = 2.06$, $y = 0.93$, $z = 5.91$, $M = 1683$, $n \cdot 10^{-20}/\text{g} = 3.58$; for CaA: $x = 2.06$, $y = 0.93$, $z = 5.91$, $M = 1654$, $n \cdot 10^{-20}/\text{g} = 3.64$; for NaX: $x = 2.96$, $y = 0.964$, $z = 38.71$, $M = 13171$, $n \cdot 10^{-20}/\text{g} = 0.457$; for CaX: $x = 2.96$, $y = 0.964$, $z = 38.71$, $M = 12950$, $n \cdot 10^{-20}/\text{g} = 0.465$. The volume of the cavities filled during maximum adsorption, calculated from $v_c = v^0/n$, has the following values:

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DUBININ, M.M.; ZHDANOV, S.P.; ZHUKOVSKAYA, Ye.G.; MURDMAA, K.O.; POLSTYANOV,
Ye.F.; SAKAVOV, I.Ye.; SHISHAKOV, N.A.;

Adsorption properties and the secondary porous structure of adsorbents having molecular sieve action. Report No.9: Parameters of elementary crystalline cells and the limiting adsorptive volumes of A-type synthetic zeolites. Izv.AN SSSR.Ser.khim. no.9:1565-1573 S '64.
(MIRA 17:10)

Adsorption properties and the secondary porous structure of adsorbents having molecular sieve action. Report No.10: Composition, adsorptive properties, and the limiting adsorptive volumes of X-type synthetic zeolites. Ibid.:1573-1580

1. Institut fizicheskoy khimii AN SSSR i Institut khimii silikatov AN SSSR.

L 20364-66 EWT(1)/EWT(m)/T

ACC NR: AP6012076

SOURCE CODE: UR/0062/65/000/010/1731/1740

AUTHOR: Dubinin, M. M.; Berezkina, Yu. F.; Polstyanov, Ye. F.; Ryabikova, Z. A.; Sarakhov, A. I.

36
33

B

ORG: Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Study of the adsorption properties and secondary porous structure of adsorbents having molecular-sieve action. Report 11. Specific surface of secondary pores of molded synthetic zeolites, type A

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1965, 1731-1740

TOPIC TAGS: adsorption, zeolite, porosity, molecular sieve

ABSTRACT: The analysis of the physical content of various methods of determining the specific surface of the secondary pores of formed zeolites is presented. The specific surface of secondary pores of an equivalent sorbent model with an accepted geometric form of the pores can be calculated from experiments on the depression of mercury and the capillary condensation of benzene. By using a highly sensitive weight adsorption device the specific surfaces, close to actual, of secondary pores of formed Type A zeolites and external surfaces of the zeolite crystals contained in them are determined. The specific surfaces of the secondary pores of the formed zeolites are determined mainly by the porous structure of additives of the binding substances. The specific surfaces of the secondary pores for equivalent porous sor-

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UDC: 541.18+661.183

L 20364-66

ACC NR: AP6012076

bent models as a rule are considerably greater than the actual specific surfaces of the secondary pores of real formed zeolites. Hence methods of depression of mercury and capillary condensation of vapors cannot serve as any accurate estimation of the specific surfaces of secondary pores of the formed zeolites. The authors thank B. A. Lipkind, T. G. Plachenov and Ya. V. Mirskiy for making available for research the samples of crystalline and formed zeolites. Orig. art. has: 6 figures, 7 formulas, and 3 tables. [JPRS] 3

SUB CODE: 07, 11 / SUBM DATE: 17Jul63 / ORIG REF: 012 / OTH REF: 001

Card 2/2 vmb

L 16293-65 EWT(m)/T Pb-4
ACCESSION NR. AP4045793

S/0062/64/000/009/1565/1573

AUTHOR: Dubinin, M. M.; Zhdanov, S. P.; Zhukovskaya, Ye. G.; Murdmaa,
K. O.; Polstyanov, Ye. F.; Sakarov, I. Ye.; Shishakov, N. A.

TITLE: Investigation of the adsorption properties and secondary porous structure
of adsorbents having molecular sieve functions. Communication 9. Parameters
of the elementary crystal cells and adsorption capacity of synthetic type A zeolites

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 9, 1964, 1565-1573

TOPIC TAGS: adsorptive property, secondary porous structure, adsorbent,
molecular sieve, elementary crystal cell parameter

ABSTRACT: Experimental data was obtained and calculations were made to
evaluate the effect of the a_0A parameters of the cubic elementary crystal cells
on the volume of the major cavities and on the adsorption capacity of type A zeo-
lite crystals and to attempt to explain the role of the minor cavities in water
adsorption by zeolites of this type. In calculating the volume of the major cavities

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L 16293-65

ACCESSION NR: AF4045793

of type A zeolites, based on x-ray structural data, it was necessary to take into account the parameters of the elementary crystal cells (a_{0A}). The following relationships were found to be quite accurate for obtaining values for the volume of the major cavity: $V_{mA} = 200.0a_{0A} - 1688\text{Å}^3$, or $V_{mA} = 417.9a_{0A} - 4373\text{Å}^3$. Thus the calculated volume and the experimental adsorption capacity increased noticeably as the elementary crystal cell parameter increased. Experimental data on the equilibrium adsorption of water by NaA crystalline zeolites at 20-100°C and equilibrium relative pressures of $5 \times 10^{-1} - 2 \times 10^{-1}$ fully confirm the potential theory of adsorption. Approximately 24 water molecules were adsorbed in a major cell of the type A zeolite. Based on its geometry, a minor cavity could contain 2-3 water molecules, but based on experimental data, adsorption of water in previously dehydrated crystals of NaA zeolite takes place only in the major cavity. Thus the role of the minor cavities in water adsorption is still to be established. "The authors thank Ye. N. Yegorov for chemical analysis of the zeolite samples and N. G. Y'ko for conducting individual experiments." Orig. art. has: 7 tables, 2 figures, and 5 equations.

Card 2/3

L 16293-65

ACCESSION NR: AP4045793

2

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry Academy of Sciences SSSR) ; Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry Academy of Sciences SSSR)

SUBMITTED: 29Dec62

ENCL: 00

SUB CODE: GC

NO REF SOV: 004

OTHER: 004

Card 3/3

ACC NR: AP7013132

SOURCE CODE: UR/0062/66/000-009/1507/1513

AUTHOR: Dubinin, M. M.; Polstyanov, Ye. F.

ORG: Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii,
AN SSSR)

TITLE: Adsorption properties of carbon adsorbents. Communication 8. Isosteres and isosteric heats of adsorption of vapors on activated charcoals with various microporous structures

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 9, 1966, 1507-1513

TOPIC TAGS: heat of activation, activated carbon

SUB CODE: 07

ABSTRACT: The adsorption isosteres and isosteric differential heats of adsorption of benzene, cyclohexane, and pyridine vapors on activated charcoals were analyzed. In the case of equilibrium adsorption of vapors on activated charcoals, the adsorption isosteres are expressed with a high degree of accuracy as straight lines for a broad range of fillings of the volume of the adsorption space. The curves of the differential heats of adsorption as a function of the parameters of the microporous structure of the activated charcoal and nature of the substance to be adsorbed were analyzed. In the case of adsorption due chiefly to a dispersion interaction, the ratios of the differential heats of

0933 0825 UDC: 541.183

ACC NR: AP7013132

adsorption to the heats of condensation for the investigated vapors are practically constant within a broad range of filling of the volume of the adsorption space. The differential heats of adsorption calculated according to the adsorption equation are in satisfactory agreement with the heats determined according to the adsorption isosteres, the discrepancies not exceeding 5%. Orig. art. has: 9 figures, 15 formulas and 1 table. [JPRS: 40,422]

Card 2/2

L 16157-65 EWT(m)/T Pb-4 SSD/AFWL/AS(mp)-2
ACCESSION NR: AP4045794 S/0062/64/009/009/1573/1580

AUTHOR: Dubinin, M. M.; Zhdanov, S. P.; Zhukovskaya, Ye. G.; Murdmaa,
K. O.; Polstyanov, Ye. F.; Sakarov, I. Ye.; Shishakov, N. A.

TITLE: Investigation of the adsorption properties and the secondary porous
structure of adsorbents functioning as molecular sieves. Communication 10.
Composition, adsorption properties and limiting adsorption volume of type X
synthetic zeolites

SOURCE: AN SSSR, Izv. Seriya khim cheskaya, no. 9, 1964, 1573-1580

TOPIC TAGS: type X zeolite, synthetic zeolite, adsorption, porous structure,
molecular sieve, isomorphic substitution, elementary cell parameter, adsorption
isotherm

ABSTRACT: The effect of varying compositions of the aluminosilicate skeleton of
type X synthetic zeolites on the volume of the major cavities and the adsorption
properties of the zeolites was determined. In the type X zeolites the $\text{SiO}_2/\text{Al}_2\text{O}_3$
ratio (x) may be varied from 2.2 to 3.3 due to the isomorphic substitution of the

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L 16157-65
ACCESSION NR: AP4045794

3

Al ions by Si ions. The parameter of the cubic elementary crystal cell was determined from x-ray data; the radius of the structural unit corresponded to the relationship $r_x = 6.406 - 0.060(x-2.00)$, with x varied from 2.2 to 3.3. Thus the volume of the major cavity decreased as the zeolite was enriched in Si, but the number of elementary cells per unit mass of dehydrated zeolite increased. The volume of the major cavities per unit mass of crystals was practically independent of the zeolite composition. The adsorption isotherms and the limiting adsorption volumes for NaX zeolites were determined for water, benzene, n-pentane, cyclohexane and pyridine at 20°C and for nitrogen at -196°C. The limiting adsorption volume of the zeolites for H₂O and N₂ was also practically independent of the NaX zeolite composition, and corresponded to the calculated values of the major cavities. Under low equilibrium pressures the adsorption of the dipolar and quadrupolar molecules (water and nitrogen) decreased proportionally to the enrichment of the NaX zeolite with Si; this was attributed to the decreasing number of ion exchange cationites in the cavities due to substitution of Si for NaAl in the aluminosilicate skeleton. "The authors thank Ye. N. Yegorov for chemical analysis of the zeolites. B. A. Lipkind for supplying zeolite sample and N. G. Ul'ko for

Card 2/3

L 16157-65
ACCESSION NR: AP4045794

conducting individual tests. Orig. art. has: 5 tables, 2 figures and 4 equations

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry Academy of Sciences SSSR); Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry Academy of Sciences SSSR)

SUBMITTED: 29Dec62

ENCL: 00

SUB CODE: GC, GP

NO REF SOV: 006

OTHER: 000

Card 3/3

DURININ, M.M.; ZHUKOVSKAYA, Ye.G.; LUK'YANOVICH, V.E.; MURDMAA, K.O.;
POLSTYANOV, Ye.F.; SENDEROV, E.E.

Adsorption volumes of synthetic mordenites. Izv. AN SSSR.
Ser. khim. no.8;1500-1502 '65. (MIRA 18:9)

1. Institut fizicheskoy khimii AN SSSR i Institut geokhimii i
analiticheskoy khimii im. V.I. Vernadskogo AN SSSR.

DUBININ, M.M.; BELOVKINA, T.T.; POLTYANOV, Ye.P.; BYASOV, V.A.; SARAKHOV,
A.I.

Absorption properties and the secondary porous structure of
adsorbents having molecular-sieve action. Report No.11:
Specific surface of secondary pores of molded type-A synthetic
zeolites. Izv. AN SSSR.Ser.khim. no.10:1731-1740 '65.

(MIRA 18:10)

I. Institut fizicheskoy khimii AN SSSR.

RELISTED BY G.N.

BEYLINA, TS.O., inzhener; BLAGONADEZHDIN, V.Ye., inzhener; BOGUSLAVSKIY, P.Ye., kandidat tekhnicheskikh nauk; VORONKOV, I.M., professor, GITINA, L.Ya., inzhener; GROMAN, M.B., inzhener; GOROKHOV, N.V., doktor tekhnicheskikh nauk [deceased]; DENISYUK, I.N., kandidat tekhnicheskikh nauk; DOVZHIK, S.A., kandidat tekhnicheskikh nauk; DUKEL'SKIY, M.P., professor, doktor khimicheskikh nauk [deceased]; DYKHOVICHNYY, A.I., professor; ZHITKOV, D.G., professor, doktor tekhnicheskikh nauk; KOZLOVSKIY, N.S., inzhener; LAKHTIN, Yu.M., doktor tekhnicheskikh nauk; LEVENSON, L.B., professor, doktor tekhnicheskikh nauk [deceased]; LEVIN, B.Z., inzhener; LIPKAN, V.F., inzhener; MARTYNOV, M.V., kandidat tekhnicheskikh nauk; MOLEVA, T.I., inzhener; NOVIKOV, F.S., kandidat tekhnicheskikh nauk; OSETSKIY, V.M., kandidat tekhnicheskikh nauk; OSTROUMOV, G.A.; PONOMARENKO, Yu.F., kandidat tekhnicheskikh nauk; RAKOVSKIY, V.S., kandidat tekhnicheskikh nauk; REGIRER, Z.L., inzhener; SOKOLOV, A.N., inzhener; SOSUNOV, G.I., kandidat tekhnicheskikh nauk; EL'KIND, I.A., inzhener; YANUSHEVICH, L.V., kandidat tekhnicheskikh nauk; BOKSHITSKIY, Ya.M., inzhener, redaktor; BULATOV, S.B., inzhener, redaktor; GASHINSKIY, A.G., inzhener, redaktor; GRIGRO'YEV, V.S., inzhener, redaktor; YEGURNOV, G.P., kandidat tekhnicheskikh nauk, redaktor; ZHARKOV, D.V., dotsent, redaktor; ZAKHAROV, Yu.G., kandidat tekhnicheskikh nauk, redaktor; KAMINSKIY, V.S., kandidat tekhnicheskikh nauk, redaktor; KOMARKOV, Ye.F., professor, redaktor; KOSTYLEV, B.N., inzhener, redaktor; POVAROV, L.S., kandidat tekhnicheskikh nauk, redaktor; ULINICH, F.R., redaktor; KLORIK'YAN, S.Kh., otvetstvennyy redaktor; GLADILIN, L.V., redaktor;

(Continued on next card)

BEYLINA, TS.O. --- (continued) Card 2.

RUPPENEYT, K.V., redaktor; TERPIGOREV, A.M., glavnnyy redaktor;
BARABANOV, F.A., redaktor; BARANOV, A.I., redaktor; BUCHNEV, V.K.,
redaktor; GRAFOV, L.Ye., redaktor; DOKUKIN, A.V., redaktor; ZADEMID-
KO, A.N., redaktor; ZASYAD'KO, A.F., redaktor; KRASNIKOVSKIY, G.V.
redaktor; LETOV, N.A., redaktor; DISHIN, G.L., redaktor; MAN'KOV-
SKIY, G.I., redaktor; MEL'NIKOV, N.V., redaktor; ONIKA, D.G.;
redaktor; OSTROVSKIY, S.B., redaktor; POKROVSKIY, N.M., redaktor;
POLSTYANOY, O.N., redaktor; SKOCHINSKIY, A.A., redaktor; SONIN,
S.D., redaktor; SPIVAKOVSKIY, A.O., redaktor; STANCHENKO, I.K.,
redaktor; SUDOPLATOV, A.P., redaktor; TOPCHIYEV, A.V., redaktor;
TROYANSKIY, S.V., redaktor; SHEVYAKOV, L.D., redaktor; BYKHOV-
SKAYA, S.N., redaktor izdatel'stva; ZAZUL'SKAYA, V.F., tekhniches-
kiy redaktor; PROZOROVSKAYA, V.L., tekhnicheskiy redaktor.

[Mining; an encyclopedic handbook] Gornoe delo; entsiklopedicheskii
spravochnik. Glav.red. A.M. Terpigorev. Chleny glav.red. F.A. Bara-
banov i dr. Moskva, Gos.nauchno-tekhnik.izd-vo lit-ry po ugol'noi
promyshl. Vol.1. [General engineering] Obshchie inzhenernye
svedeniya. Redkollegiia toma S.Kh.Klorik'ian i dr. 1957. 760 p.
(Mining engineering) (MLRA 10:10)

POLSTYANOY, G.N.; KHARCHENKO, A.K.

Transition to a shortened workday in coal mines. Ugol' 31 no.12:4-8
D '56. (MLRA 10:2)

(Donets Basin--Coal mines and mining)

KRIVOSHEYEV, V.N., inzh.; POLSTYANOY, V.A., inzh.; CHERNOV, G.I., inzh.
LAZEEVOY, V.S., inzh.

Adopting machines for calcining limestone in the sintering process.
(MIRA 14:4)
Stal' 21 no. 4:293-296 Ap '61.

1. Makeyevskiy metallurgicheskiy zavod.
(Ore dressing) (Limestone)

POLSTYANOY, V.I., inzhener

Using centrifuges to separate spent lye from neat soap. Masl.-shir.
(MLRA 8:12)
prom.21 no.6:32 '55.

1. Khar'kovskiy mylovarennyy zavod no.1.
(Soap)

102574110005-7
BESPYATOV, M.P., kandidat tekhnicheskikh nauk, dotsent;
PREOBRAZHENSKAYA, Ye.A., inzhener; POLSTYANOY, V.I., inzhener.

THE apparatus for continuous carbonate saponification of split
fats. Masl.-zhir. prom. 22 no.7:29-30 '56. (MLRA 9:12)

1. Khar'kovskiy politekhnicheskiy institut (for Bespyatov and
Preobrazhenskaya) 2. Khar'kovskiy mylovarennyy kombinat
(for Polstyanoy).
(Oil industries--Equipment and supplies)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341910005-7

POL'SKIY M. N.

"The Problem of the Porosity of Soil Complexes,"

Pochvovedeniye, No. 4, 1949.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341910005-7"

KHRUSHCHEV, N.S.; PODGORNYY, N.V.; ZASYAD'KO, A.F.; RUDAKOV, A.P.; KAZANETS, I.P.; SHILIN, A.A.; MEL'NIKOV, N.V.; BURMISTROV, A.A.; SHEVCHENKO, V.V.; MAYAKOV, L.I.; ROZENKO, P.A.; KUZ'MICH, A.S.; ZADEMIDKO, A.N.; BRATCHENKO, B.F.; STRUYEV, A.I.; KRASNIKOVSKIY, G.V.; BOYKO, A.A.; KAGAN, F.Ya.; USKOV, A.A.; VLADYCHENKO, I.M.; TOPCHIYEV, A.V.; DEGTYAREV, V.I.; KHUDOSOVITSEV, N.M.; GRAFOV, L.Ye.; IVANOV, V.A.; KRATENKO, I.M.; GOLUB, A.D.; IVONIN, I.P.; SAVCHENKO, A.A.; ROZHCHENKO, Ye.N.; CHERNEGOV, A.S.; MARKELOV, M.N.; LALAYANTS, A.M.; GAPONENKO, F.T.; POLUEKTOV, I.A.; SKLYAR, D.S.; PONOMARENKO, N.F.; POTAPOV, A.I.; POLYAKOV, N.V.; SUBBOTIN, A.A.; POLSTYANOY, G.N.; TRUKHIN, P.M.; TKACHENKO, A.G.; OSTROVSKIY, S.B.; NYRTSEV, M.P.; DYADYK, I.I.; SHPAN'KO, T.P.; RUBCHENKO, V.P.

Kondrat Ivanovich Pochenkov; obituary. Sov. shakht. 11 no.9:
48 S '62. (MIRA 15:9)
(Pochenkov, Kondrat Ivanovich, 1905-1962)

POLSTYANOY, V.I.

Processing peanuts in Ukrainian oil mills. Masl.-zhir.prom. 17
no.8:1-3 Ag '52. (MLRA 10:9)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya
Ukrzavraszhirmaslo.
(Ukraine--Peanuts)

BESPYATOV, M.P., kand.tekhn.nauk; POLSTYANOY, V.I., inzh.; VITSENKO,
I.S., inzh.; SUKHOBRUSOV, P.N., inzh.; SHVEDOV, V.K., inzh.;
KULIK, Yu.A., inzh.

Continuous contact splitting of fats. Masl.-zhir. prom. 23
(MIRA 10:12)
no. 9:22-23 '57.

1. Khar'kovskiy politekhnicheskiy institut (for Bespyatov).
2. Khar'kovskiy mylovarenny kombinat (for Polstyanoj, Vitsenko,
Sukhobrusov, Shvedov, Kulik).
(Oils and fats)

POLSTYANOY, V. I.

BESPYATOV, M.P., kandidat tekhnicheskikh nauk; POLSTYANOY, V.I., inzhener;
SVINAR, K.P., inzhener.

Operation of continuous apparatus for carbonate saponification of
split fats. Masl.-zhir. prem. 23 no.2:39-40 '57. (MIRA 10:4)

1. Khar'kovskiy politekhnicheskiy institut (for Bespyatov). 2. Khar'-
kovskiy mulevarennyy kombinat (for Polstyanoy, Svinar).
(Oils and fats)

SKIPIN, A.I., kandidat tekhnicheskikh nauk; POIPTYANOY, V.I., inzhener.

Purifying peanut oil. Masl.-zhir.prom. 18 no.6:27-28 Je '53. (MLRA 6:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for Skipin).
2. Tsentral'naya nauchno-issledovatel'skaya laboratoriya Ukrglavraszhir-maslo. (Peanut oil)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341910005-7

POLSTYANOY, V. I., Eng.

Oilseeds - Analysis

Moisture meters used in the oil and fat industry. Masl.-zhir. prom. 13 No. 2, 1953.

SO: Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341910005-7"

POLSTYANOY, V.P., inzhener.

Rapid method for determining moisture in meats. Masl.-zhir.prom.
(MIRA 10:9)
17 no.12:10-12 D '52.

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya Ukrzav-
rashirmslo.
(Moisture--Measurement) (Oilseeds)

DOBRANYI, Geza; DOBOS, Jozsefne; POLSZTER, Akos

Changing the color equilibrium of color reversible films by applying various developing agents. Kep hang 6 no.1:1-4 F '60.

1. Magyar Filmlaboratorium.

POLTARANINA, T.F.

Separation of heavy nonferrous metals from diluted aqueous
solutions by ionic flotation. Zap. LGI 42 no.3:78-84 '63.
(MIRA 17:10)

Country : USSR

Category : Cultivated Plants. Cereals. Leguminous Plants.
Tropical Cereals. M

Abs Jour : RZhBiol., No 6, 1959, No 24803

Author :
Inst :
Title :

Orig Pub :

Abstract : from the bogar sections was higher by 2-3 c/ha than the harvest of the seeds from the irrigated soils. To obtain high-quality seeds from irrigated soils, it is recommended to develop for the seed parcels specific agricultural engineering (fertilization, irrigation regime, sowing periods and selection of the varieties). -- L. S. Garanika

Card : 2/2

10

POLTARATSKIY, V.G.

[How to plant potatoes in checkrows] Kak posadit' kartofel' kvadratno-gnezdovym sposobom. Frunze, Kirgizskoe gos. izd-vo, 1954. 21 p.
(Potatoes) (MLRA 10:3)

ALISOV, Boris Pavlovich; POLTARAUS, Boris Vasil'yevich; TATARINOVA,
Ye.I., red.; KOZLOVA, T.A., tekhn. red.

[Climatology] Klimatologija. Moskva, Izd-vo Mosk. univ., 1962.
255 p. ____ 14 maps. (MIRA 16:1)
(Climatology)

GVOZDETSKIY, N.A., prof.; ZHUCHKOVA, V.K., dots.; ALISOV, B.P., prof.;
VASIL'IEVA, I.V., dots.; VARLAMOVA, M.N., tekhnik-kartograf;
DOLGOVA, L.S., dots.; ZVORYKIN, K.V., st. nauchnyy sotr.;
ZEMTSOVA, A.I., assistant; IVANOVA, T.N.; LEBEDEV, N.P., st.
prepodavatel'; LYUBUSHKINA, S.G.; NESMEYANOVA, G.Ya., mlad.
nauchnyy sotr.; PASHKANG, K.V., st. prepod.; POLTARAUS, B.V.,
dots.; RYCHAGOV, G.I., st. prepod.; SPIRIDONOV, A.I., dots.;
SMIRNOVA, Ye.D., mlad. nauchnyy sotr.; SOLNTSEV, N.A., dots.;
FEDOROVA, I.S., mlad. nauchnyy sotr.; TSESEL'CHUK, Yu.N.,
mlad. nauchnyy sotr.; SHOST'INA, A.A., mlad. nauchnyy sotr.;
Prinimali uchastiye: BELOUSOVA, N.I.; GOLOVINA, N.N.;
KALASHNIKOVA, V.I.; KOZLOVA, L.V.; KARTASHOVA, T.N.;
PAN'KOVA, L.I.; URKIKHO, V.; PETROVA, K.A., red.; LOPATINA,
L.I., red.; YERMAKOV, M.S., tekhn. red.

[Physicogeographical regionalization of the non-Chernozem
center] Fiziko-geograficheskoe raionirovaniye nechernozemnogo
tsentra. Pod red. N.A.Gvozdetskogo i V.K.Zhuchkovoi. Moskva,
Izd-vo Mosk. univ., 1963. 450 p. (MIRA 16:5)
(Physical geography)

POLTARAUS, B.V.

Radiation regime in certain types of summer weather and the sea's influence on it in the Evpatoria region. Vest.Mosk. un. Ser. 5:
Geog. 17 no.1:27-36 Ja-F '62. (MIRA 16:7)

1. Kafedra meteorologii i klimatologii Moskovskogo universiteta.
(Evpatoria region--Solar radiation--Observations)

POLTARAUS, B.V.

Meteorological effectiveness of forest shelterbelts
in summer season. Vest. Mosk. un. Ser. 5 no.5:28-34
S-O '60. (MIRA 13:11)

1. Kafedra meteorologii i klimatologii Moskovskogo universiteta.
(Forest influences) (Evaporation--Measurement)

POLTARAUS, B.V.

Seasonal variations in the wind-breaking action of forest shelterbelts. Vest. Mosk. un. Ser. biol., pochv., geol., geog. 12 no.4:
227-231 '57. (MIRA 11:5)

1. Kafedra klimatologii Moskovskogo gosudarstvennogo universiteta.
(Windbreaks, shelterbelts, etc.)

POLTARAUS, B.V.

Influence of shelterbelts on the temperature of the air. Vop.geog.
28:139-155 '52. (MLRA 7:5)

1. Geograficheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta.
(Windbreaks, shelterbelts, etc.) (Atmospheric temperature)

CATEGORY : *...n*

CATEGORY : *...n*

ABSTRACT JOUR. : RZBiol., No. 1, 1959, No. 327

AUTHOR : Shulyandin, A. M.; Poltarev, N. N.

INST. :

TITLE : Inheritance and Formation of Vernalization Stage in Hybrids Between Species of Wheat

ORIG. PUB. : Agrobiologiya, 1957, No 4, 48-58

ABSTRACT : Experimental data on analysis of six generations of hybrids between soft winter wheat (Alibanshaya, Sesskaya 3, Ferrugineum 1239, Fiminka, Lyutetsens 17) which undergo the vernalization stage, at a temperature of 0-2°, within 40-45 days; hard summer wheat (Narodnaya and Nelyanopush 69), which undergo vernalization within 3-7 days, and semi-winter varieties (Arandana, Gordenfoma 146/7, and Krasavitsa Kazarev), which undergo it within 15-17 days at a temperature of about 5°. By crossing soft winter wheat with hard summer wheat a rare winter wheat was produced which, when planted in the spring, produces no spikes, and on being planted in the fall is found to be winter hardy at Kherson and Khar'kov.

CARD: S. Ya. Krayevsky.

SHULYNDIN, A.F., doktor sel'skokhozyaystvennykh nauk; POLTAREV,
Ye.M., kand.biologicheskikh nauk

Development and inheritance of photoperiodic features in
interspecific hybrids of wheat. Agrobiochiia no.4:516-
524 Jl-Ag '61.
(MIRA 14:7)

1. Ukrainskiy ordena Lenina nauchno-issledovatel'skiy institut
rasteniyevodstva, selektsii i genetiki, Khar'kov.
(Wheat breeding) (Photoperiodism)

POLTAREV, Ye.M.; SHULYNDIN, A.F.

Formation of the photo stage in interspecific wheat hybrids, Dokl.
AN SSSR 110 no.5:866-869 O '56. (MERA 10:1)

1. Institut genetiki i selektsii Akademii nauk USSR. Predstavлено
академиком Т.Д. Лысенко.
(Wheat)

SHULYNDIN, A.Ye., doktor sel'skokhozyaystvennykh nauk; POLTAREV, Ye.N.

Inheritance and formation of the vernalization stage in interspecific wheat hybrids. Agrobiologiya no.4:48-58 Jl-Ag '57. (MLRA 10:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut rasteniyevodstva, selektsii i genetiki, Khar'kov.
(Wheat) (Vernalization)

SHULYNDIN, A.F., doktor sel'skokhozyays tvennykh nauk; POLTAREV, Ye.M.

Differences in the vernalization stage in seeds and green plants
of interspecific hybrids. Dokl. Akad. sel'khoz. 23 no.4:14-17 '58.
(MIRA 11:5)

1.Ukrainskiy nauchno-issledovatel'skiy institut rasteniyevodstva,
seleksii i genetiki. Predstavлено академиком D.D. Berezhnevym.
(Wheat--Vernalization)

POLTAREV, YE. M., CAND BIO SCI, ^M STUDY OF THE FORM ^{other} ~~of~~
AND SUCCESSION OF ~~the~~ STAGES OF VERNALIZATION AND LIGHT
~~PERIODON~~ IN INTERSPECIES ^{as} HYBRIDS OF WHEAT IN RELATION
TO WINTERHARDINESS. KIEV, 1960. (MIN OF HIGHER AND SEC
SPEC ED UKSSR. KIEV ORDER OF LENIN STATE UNIV IM T. G.
SHEVCHENKO). (KL, 2-61, 205).

-92-

POLTAREV, Ye. M.

Iarovization stage in hybrid and nonhybrid wheats under natural
34-40 conditions. Agrobiologiya no. 3:34-40 My-Je '58.(MIRA 11:7)

1. Ukrainskiy nauchno-issledovatel'skiy institut rasteniyevodstva,
seleksii i genetiki, g. Khar'kov.
(Wheat)

POLTAREV, Ye.M.

Vernalization stage in interspecific wheat hybrids. Dokl.AN
SSSR 111 no.5:1138-1141 D '56. (MLRA 10:2)

1. Institut genetiki i selektsii Akademii nauk USSR.
Predstavлено академиком А.Л. Курсановым.
(Wheat) (Vernalization)

POLTARAUS, B. V.

POLTARAUS, B. V. - "Drought in the Territory of Voronezhskaya Oblast and Tambovskaya Oblast." Sub 25 Apr 52, Moscow Order of Lenin State U imeni M. V. Lomonosov. (Dissertation for the Degree of Candidate in Geographical Sciences).

SO: Vechernaya Moskva January-December 1952

POLTASHEVSKIY, G.V., tekhn.; NECHITAYLO, K.Ya., inzh.

Inductor for the heating of welded boiler collector joints during assembly operations. Svar. proizv. no. 3:39-40 Mr '61. (MIRA 14:3)

1. Trest "Teploenergomontazh" (Khar'kov).
(Boilers—Welding) (Induction heating)

POLTASHEVSKIY, G.V., proizvoditel' rabot; NECHITAYLO, K. Ya., inzh.

Thermal treatment of the joints of the boiler headers during
installation operations. Energetik 9 no.5:9-10 My '61.

(MIRA 14:5)

(Boilers--Welding)

S/135/61/000/003/012/014
A006/A001

AUTHORS: Poltashevskiy, G. V., Technician, Nechitaylo, K. Ya., Engineer

TITLE: Inductor for Preheating Welded Butts of Boiler Manifolds During Assembly on Site

PERIODICAL: Svarochnoye proizvodstvo, 1961, No. 3, pp. 39-40

TEXT: Manifolds of TP-100 boilers are assembled and welded on site. Welding of the manifolds is conducted with preheating of the butts. 12XMФ (12KhMF) steel manifolds require heat treatment after welding. For this purpose induction heating is employed. Difficulties arose when placing the inductors, since the distance along the axis of manifolds to be welded was only 200 mm. A bare cable inductor of 180 - 240 mm² section could not be placed on such a limited space. Therefore 2 other types of inductors were tested, namely: a 50 x 4 mm aluminum-bar inductor and a water cooled copper-tube inductor with 12 x 1 and 10 x 1 tube diameter. The aluminum inductor proved unsuitable. The copper tube device was more appropriate and was employed for heat treating important butts of the manifolds (See Figure). The inductor is made of 8 - 12 copper tube coilings; tube diameter is 12 x 1 or 10 x 1 mm. The coilings are insulated by 1 - 2 glass cloth

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Inductor for Preheating Welded Butts of Boiler Manifolds During Assembly on Site

layers or 2 - 3 asbestos cloth or sheet layers. The coilings are water cooled; water (18 - 20°C) is supplied from a tank and removed after cooling. The tank is placed 10 m above the annealing space. Maximum current density is 40 amp/mm²; it can be raised when using 8 x 1 mm diameter tubes, but water pressure must then be higher too. It should be considered that the annealed tubes loose their ability to deformation after 2 - 3 fold coiling; their further use requires repeated annealing. Preheating conditions of manifold butts for welding and heat treatment are given in a table:

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Diameter of mani-folds in mm	Number of coilings in the inductor	Mean annealing current amp	Transformer type	Preheating time of butts for welding in sec.	Time of pre-heating the butts to 730°C in sec
273 x 35	10 - 12	750 - 850	ТСД(TSD)-1000	35 - 45	50 - 70
273 x 45	10 - 12	750 - 850	ТСД(TSD)-1000	35 - 45	50 - 70
377 x 50	10 - 12	900 - 1200	ТСД(TSD)-2000	60 - 90	90 - 120
426 x 20	8 - 10	800 - 850	ТСД(TSD)-2000	45 - 60	60 - 90
325 x 18	8 - 10	700 - 800	ТСД(TSD)-1000	30 - 40	45 - 60

Remark: The feed voltage of the network must be constant

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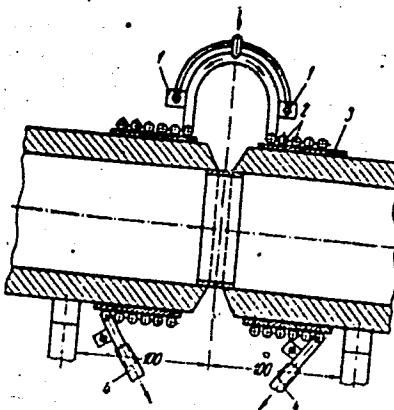
Inductor for Preheating Welded Butts of Boiler Manifolds During Assembly on Site

Figure:

Inductor for preheating manifold butts
1 - contacts; 2 - inductor coilings; 3 - asbestos sheet insulation; 4 - rubber tubes for removing water.

There are 1 figure and 1 table.

ASSOCIATION: "Teploenergmontazh" Trust (Khar'kov)



Card 4/4

POLTAVA, I.G.; KAZANSKAYA, T.B.

Morphology and cytology of *Actinomyces streptomycini* in relation
to the composition of culture media. *Mikrobiologija* 30 no.1:72-
75 Ja-F '61. (MIRA 14:5)

1. Institut mikrobiologii AN SSSR.
(ANTINOMYCES)

POLTAVA, I. G., AGATOV, P. A., KALASKAYA, T. B., GALANINA, L. A. (USSR)

"Participation of Certain Chemical Compounds in Streptomycin Biosynthesis."

Report presented at the 5th International Biochemistry Congress, Moscow,
10-16 August 1961

MAYMIN, Semen Rafailovich; POLTAVA, Leonid Ivanovich; GOKHFEL'D, M.V.,
dota., otv. red.; TRET'YAKOVA, AN., red.; SEMASHKO, Yu. Yu.,
tekhn. red.

[Electric substations and networks on mine surfaces] Pod-
stantsii i seti na poverkhnosti rudnikov. Khar'kov, Izd-vo
Khar'kovskogo univ. 1961. 255 p. (MIRA 16:7)
(Electricity in mining)
(Electric power distribution)

POLTAVA, Vera Andreyevna; SHAVARINA, N., red.; CHERNOVA, T., spets. red.; YURGANOVА, M., tekhn. red.

[Dressmaking, knitting and embroidery] Kroika, shit'e, viazanie i vyshivanie. Chita, Chitinskoe knizhnoe izd-vo, 1960. 213 p.

(MIRA 14:11)

(Dressmaking--Pattern books) (Knitting) (Embroidery--Patterns)

17(2)

SOV/20-128-4-57/65

AUTHORS: Shaposhnikov, V. N., Academician, Kazanskaya, T. E.,
Poltava, I. G.

TITLE: The Effects of Compounds of the Pyrrole Group on the Development of *Actinomyces streptomycini*

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 4, pp 840-842
(USSR)

ABSTRACT: The fungus mentioned in the title grows well on a medium containing one single nitrogen source, namely the amino acid proline (of the pyrrole group (I)); physiologically active substances containing one pyrrole ring ((II)-(VIII)) are mentioned. The problem still to be solved is, whether *Act. streptomycini* makes use of the pyrrole ring or whether a pyrrole ring which is connected with a certain atom group, is required for the development of this fungus. For this purpose experiments with some of the mentioned compounds had to be made. Earlier experiments with oxyproline showed that this substance alone, in contrast to proline, favors the growth of *Actinomycetes*. A list of publications (Refs 2-6) is given which shows that there are hardly any data on the subject concerned. Therefore the effect mentioned in the title

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The Effects of Compounds of the Pyrrole Group on the Development of *Actinomyces streptomycini*

is meant to be explained for the first time by the authors. Strain LS-1 from the Kiyevskaya selektsionnaya stantsiya (Kiyev Selection Station) growing on a mineral glucose containing medium, is used for this purpose. 2% of soya bean flour or amino acid or of any pyrrole compound were added which corresponded to a nitrogen content of 112 mg per 100 ml. For the method see reference 1. The effects of succinamide (VIII), succinimide (VII), pyrrolidine (II) and others, on the vital activity of strain LS-1 were examined. Proline (III) and oxyproline (IV) were also used for comparison. Table 1 shows the results. On the basis of these results, the authors arrived at the following conclusions: 1) synthetic media, containing proline, histidine with lysine and also one of the pyrrole group: (III), (VII), or (VIII), favor the growth of the fungus and the formation of streptomycin. The yields of the latter amounted to 74-84% of those with soya bean flour. 2) (IV), the only nitrogen source, favors the growth but stimulates the development of the antibiotic only weakly (Table 1). Added to media with basic amino acids (IV) also favors growth, but reduces the streptomycin yield (Table 2).

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The Effects of Compounds of the Pyrrole Group on the Development of Actinomyces streptomycini

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There are 2 tables and 6 references, 1 of which is Soviet.

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR
(Institute of Microbiology of the Academy of Sciences, USSR)

SUBMITTED: July 2, 1959

Card 3/3

8(5)

AUTHOR:

Poltava, I. I., Docent

SOV/105-59-3-21/27

TITLE:

An Analysis of the Reliability of Electric Power Supply
Systems in Deep Coal Pits (Analiz nadezhnosti sistem elektro-
snabzheniya glubokikh ugol'nykh shakht)

PERIODICAL:

Elektrichestvo, 1959, Nr 3, pp 91 - 92 (USSR)

ABSTRACT:

This article is a commentary on the paper by V. I. Bocharov in Elektrichestvo, 1957, Nr 10. Errors in the paper by Bocharov are pointed out. On the basis of an incorrect formula, Bocharov arrives at the conclusion that no further reserve can be economically justified if two or three supply cables are in operation. The interrelation between the electric power consumption and the efficiency of a pit is investigated and it is shown that Bocharov does not take into account the relation between Δq and the power supply deficit ΔE . This is the first error committed by him.

$\Delta q = \frac{\Delta Q}{Q_n}$, where ΔQ denotes the reduction in coal production and Q_n is the target coal production. The second error

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An Analysis of the Reliability of Electric Power Supply SOV/105-59-3-21/27
Systems in Deep Coal Pits

committed by Bocharov consists of the fact, that he made an erroneous assumption in the calculation of the emergency probability for N cables without reserve. He assumed the numerical value of the emergency probability with the argumentation, that a breakdown of two or more cables is improbable. This way of reasoning, however, is a far cry from probability theory. Formula (4) is deduced and it shows that without reserve the reliability of an electric power supply decreases with an increase in the number of cables. This is exactly contradictory to the conclusions drawn by Bocharov. It is shown that formula (10) deduced by Bocharov is of no practical value either with or without reserve. The numerical values resulting from formula (7) in this paper specifying the mathematical expectation for a breakdown (loss) differ by a factor of six from those advanced by Bocharov in the calculation of a practical example. There is 1 Soviet reference.

ASSOCIATION: Dneprovskiy gornyy institut (Dnepr Mining Institute)

Card 2/2

POLTAVA, L.I., dots.

Analyzing the reliability of electric supply systems for deep coal
mines. Elektrichestvo no.3:91-92 Mr '59. (MIRA 12:3)

1. Dneprovskiy gornyy institut.
(Electricity in mining)

POLTAVA, L.I., dotsent; KIRICHOK, Yu.G., inzh.

Transfer functions and structural diagrams of electric drives
with mechanical resilient links. Izv. vys. ucheb. zav.; gor.
zhur. 7 no.5:98-104 '64. (MIRA 17:12)

1. Dnepropetrovskiy ordena Trudovogo Krasnogo Znameni gornyy
institut imeni Artyoma (for Poltava). 2. Energolaboratoriya
tresta Dzerzhinskra (for Kirichok). Rekomendovana kafedroy
gornoj elektrotehniki Dnepropetrovskogo ordena Trudovogo
Krasnogo Znameni gornogo instituta im. Artyoma.

POLYANA, L. I.

PA 15/49T23

USER/Electricity

Jul 48

Generators, Direct Current

"Sudden Short Circuits in Direct-Current Generators
With Three Excitation Windings," L. I. Poltava,
Docent, Cand Tech Sci, Krivoy Rog Mining Inst, 2 $\frac{1}{4}$ pp

"Elektricheskoe" No 7

Generators of this type are extensively used in Leonard
system for controlling presses. Considers case of
sudden short circuit and analyzes transition process.
Deduces formula for maximum current.

15/49T23

POLTAVA, L. I.

PA 15/49T41

USSR/Electricity

Aug 48

Motors, Direct Current
Motors, Electric

"Regulating Characteristics of a Direct-Current
Shunt Motor," L. I. Poltava, Cand Tech Sci,
Krivoi Rog, 1 $\frac{1}{2}$ pp

"Elektrichestvo" No 8

Refers to article by N. V. Gorokhov on this subject
(29T25). Investigates characteristics of shunt
motors used for mechanisms where static moment is
function of speed, e.g., fans, centrifugal pumps,
etc.

15/49T41

POLTAVA, L.I., dots.; FURSOV, V.D., assistant

Protection from single-phase contacts to ground in high-voltage mine circuits. Izv.vys.ucheb.zav.; gor.zhur. no.1: 54-59 '59. (MIRE 13:1)

1. Dnepropetrovskiy gornyy institut. Rekomendovana kafedroy tekhnologii gornoj elektrotekhniki.
(Electricity in mining)

POLTAVA, L.I., dotsent; FURSOV, V. I., assistant

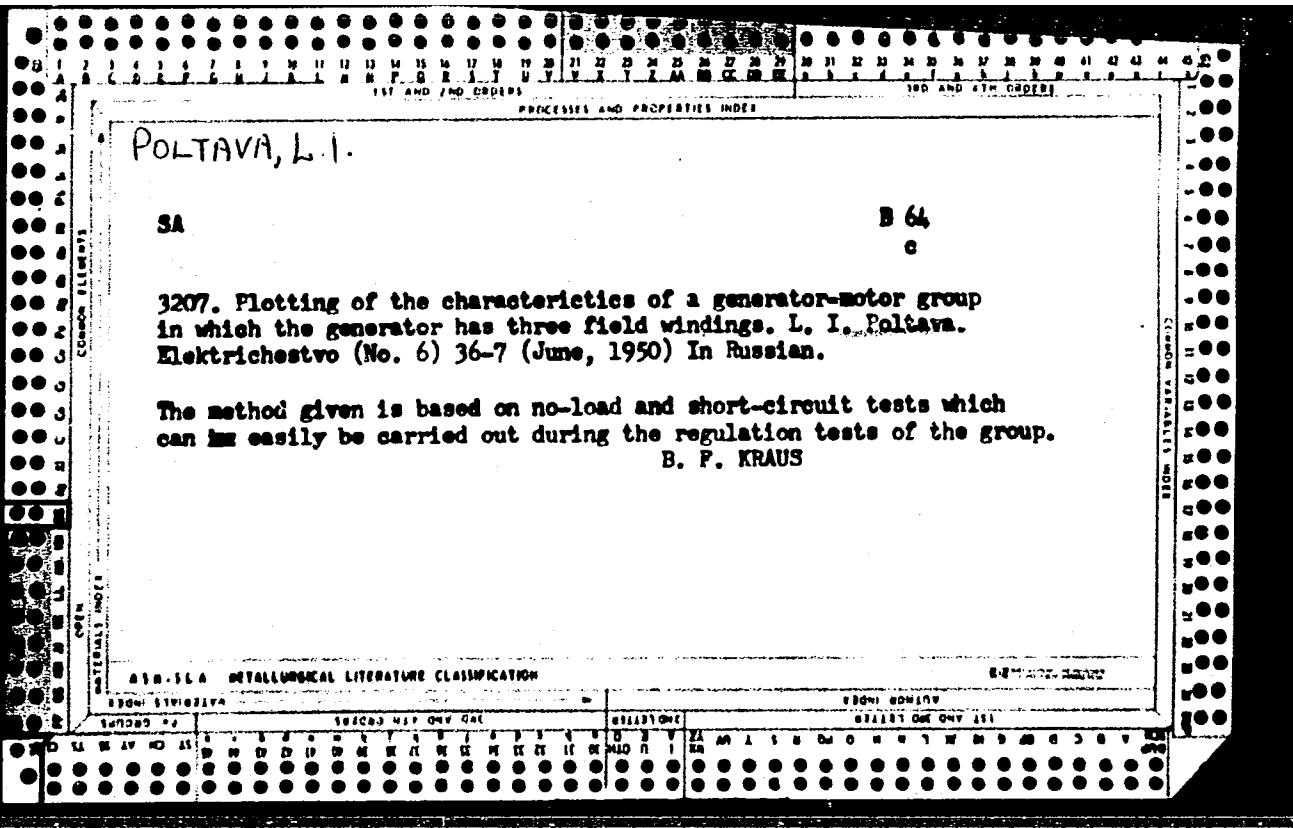
Automation and telemechanics in central mine substations in coal mines. Izv. vys. ucheb. zav.; gor. zhur. no.11:92-98 1959.

1. Dnepropetrovskiy gornyy institut imeni Artyoma. Rekomendovana kafedroy gornoj elektrotehniki. (MIRA 14:5)

(Coal mines and mining)

(Automatic control)

(Electricity in mining)



POLTAVA, L.I., kand.tekhn.nauk; KIRICHOK, Yu.G., inzh.

Indices of the operating reliability of skip hoists. Gor. zhur.
no.3:59-60 Mr '62. (MIRA 15:7)

1. Dnepropetrovskiy gornyy institut (for Poltava). 2. Energolab-
ratoriya tresta Dzerzhinskruda, Krivoy Rog (for Kirichok).
(Mine hoisting)

VOLOTKOVSKIY, Sergey Andronikovich, doktor tekhn. nauk, prof.; POLYANA,
Leonid Ivanovich, kand. tekhn. nauk, dots.; BUN'KO, Viktor
Aleksandrovich, kand. tekhn. nauk, dots.; PODOL'SKIY, Vladimir
Arsen'yevich, kand. tekhn.nauk, dots.; SAPILOV, A.V., otv. red.;
KOVAL', I.V., red. izd-va; PROZOROVSKAYA, V.L., tekhn. red.;
SHKLYAR, S.Ya., tekhn. red.

[Technical means for automation of the mining industry] Tekhnicheskie sredstva avtomatiki v gornoj promyshlennosti. Pod obshchey red. S.A. Volotkovskogo. Moskva, Gosgortekhizdat, 1962.
331 p. [REDACTED]

(MIRA 16:2)

1. Dnepropetrovskiy gornyy institut im. Artyoma (for Volotkovskiy,
Poltava, Bun'ko, Podol'skiy).
(Automation) (Mining engineering)

POLYANA, Vera Andreyevna; RAPOTA, A.M., spets. red.; MURAKAYEVA, A.,
red. izd-va; BAKHTIYAROV, A., tekhn. red.

[Learn to sew, knit, embroider] Uchites' shit', viazat', vyshivat'. 2., perer. i dop. izd. Tashkent, Gosizdat UzSSR, 1962.
359 p.

(MIRA 15:7)

(Sewing—Study and teaching)
(Knitting—Study and teaching)
(Embroidery—Study and teaching)